Attorney Docket No.: F3: Serial No.: 10/

F3315(C)

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**REMARKS** 

Amendments to the Claims

Independent claims 1 has been amended without prejudice to recite preferred

embodiments of applicants invention that are more clearly differentiated from the prior

art.

Amended claim 1 now specifies that the compositions contain no additional

stabilizers and no additional emulsifiers, i.e., the composition is both emulsifier free and

stabilizer free as disclosed on page 6, lines 31-33.

Amended claim 1 also specifies that the product must be made by a process that

includes one of the following steps (as disclosed on pages 9-11):

a) adjusting the pH of a fruit and/or vegetable puree to a value above an

isoelectric point of any protein to be incorporated into the frozen aerated product, said

pH adjusting followed by; producing a premix comprising fat, milk solids not fat,

sweetener and about 5 to about 80 w/w% of said pH adjusted fruit and/or vegetable

puree followed by; homogenizing and pasteurizing said premix as specifically disclosed

on page 9, lines 27-33;

or

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b) homogenizing and pasteurizing a premix comprising water, fat, milk solids not fat and sweetener, cooling the pasteurized premix and then adding to said premix a fruit and/or vegetable puree containing sufficient soluble and insoluble fibre to provide the necessary soluble and insoluble fibre in the frozen aerated product; (specifically disclosed on page 10, line 30 to page 11, line 3).

The limitation on meltdown resistance has been removed from claim 1 and incorporated into claim 21 which was amended accordingly.

Claim 22 is hereby canceled without prejudice.

## Claim Rejections - 35 USC § 103

Claims 1-5 and 20-22 were rejected under 35 USC §103(a) as being unpatentable over Brake (US 6,432,466) in view of Jonas (US 4,971,824). Applicants' respectfully request that the Examiner reconsiders and withdraws the rejection in light of the above amendments and following remarks.

Brake was cited for its disclosure of a frozen product comprising on a weight basis about 3-32% sweetener, about 0.2-1.5% stabilizer (see claim 1), about 0-0.12% emulsifier, 0-10% non-fat milk solids, 0-5% milk fat, water and 20-90% fruit puree. Since emulsifier is an optional ingredient, some embodiments disclosed by Brake are emulsifier free (page 2 of Office Action mailed January 9, 2008).

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Brake is silent with respect to compositions that contain no additional stabilizer, aerated products that have any specific overrun, pH, meltdown resistance, meltdown initiation time and any specific amounts of fiber.

Brake is also silent regarding the isoelectric point of proteins in general and in particular any processing steps which must be used to ensure that products incorporating proteins are stable or have optimal properties.

Unlike emulsifiers which are optional, Brake specifically teaches that "the stabilizer ingredient is used to improve the ability of the products to withstand commercial shelf life and substantial heat shock without undue deterioration" and must be present at a level of about 0.2% to 1.5% by weight of frozen dessert product (Claim 1).

The Examiner asserted that Brake includes stabilizers at levels as low as 0.04% which the Examiner concludes is essentially zero. The Examiner's analysis is based on multiplying the lower limit of stabilizer recited by Brake for the base composition in Table 1 (0.2% by weight) by the amount of base composition used in Example 1 to form the frozen aerated product which the Examiner assumed is 20% by weight. However applicants' respectfully point out that this analysis is flawed. The percentage of base composition used to make the frozen aerated product disclosed in Example 1 is 20% - 35% BY VOLUME of base mixture not by weight of base mixture (column 5, line 47). If this base mixture is mixed with 80 to 65% air by volume, the weight percent stabilizer in the final product would still be 0.2% to 1.5% by weight of product as would be required so that the example actually fell within the scope of claim 1. Thus, the lower limit of

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stabilizer in the compositions taught by Brake is indeed 0.2% by weight not 0.04% as asserted by the Examiner.

Jonas teaches a frozen dessert comprising fruit puree. The frozen dessert has an overrun between about 18 and 100, a pH of less that 4.5. The frozen products contain fruit purees and no non-natural additives. The sugars are derived from fruit juices and have no added vegetable proteins and stabilizer.

Jonas does not disclose compositions containing milk solids or added sugars in combination with fruit purees or other sources of dietary fiber. Jonas in fact dissuades the use of milk solids, and added sugars stating on column 3, lines 33-41. "The fruit products described herein provide a creamy type frozen dessert without the disadvantageous ingredients of a milk product based food. For example, the dessert of the instant invention has no milk, milk solids, lactose, cholesterol, added sugars or artificial flavors".

Jonas is silent regarding any processing steps which must be used to ensure that acidic products that incorporate proteins are stable or have optimal properties such as high melt-down resistance.

In contrast, applicants' amended claims are directed to highly stable, acidic, frozen aerated products that contain milk proteins and sweeteners in combination with specific dietary fibers (e.g., from fruit purees), and do not contain any added emulsifiers and any added stabilizers.

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Applicants have discovered that when milk proteins are incorporated with acid fruit purees, the properties of the resulting product strongly depends on how the product is assembled, i.e., the manufacturing process, in addition to the composition of the puree in terms of its soluble and insoluble fiber content.

To have derived applicants invention from the combined teaching of Brake and Jonas, the artisan would have had to select the optional milk solids and the processed sugars of Brake while leaving out required stabilizers, which Brake regards as essential; combining these elements with fruit purees; and then processing to the standards of Jonas which teaches nothing about the processing of compositions which have both fruit purees and milk solids. Further, the artisan would have to ignore the teaching of Jonas that the dessert "has no milk, milk solids, lactose, cholesterol, added sugars or artificial flavors".

It is well held that "it is impermissible within the framework of 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such references fairly suggest to one of ordinary skill in the art" (EWP Corp v. Reliance Universal, Inc 755 F.2d at 907 – see also Bausch & Lomb, Inc v. Barnes-Hind/Hydrcurve, Inc 796 F.2d 44, 448-49 (Fed Cir. 1986)

Applicants' submit that it would only be through hindsight that it could be argued that the artisan would have "picked and chosen" the specific elements to combine from Brake and Jones while ignoring the references as a whole and in particular the

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disclosures in both references that would have taught away or dissuaded the proposed combination.

Applicants further submit that even in the unlikely event that the Artisan had made such a selection, the combination of references would not have lead to applicants' invention because neither reference discloses either of the alternative process steps recited in claim 1 by which the frozen product must be made and in fact teach away from these process steps.

Brake teach away from applicants' method by disclosing at column 4, line 66 to column 5, line 5 that "The ingredients [all the ingredients in the composition including milk solids and fruit puree] are added to the mixer, and agitation is commenced and continued for a certain period to form a base mixture. The base mixture is then pasteurized....."

Jonas discloses on column 3, line 62 that "The ingredients [all the ingredients in the composition] were mixed and heated to boiling..... The base was asceptically processed at 194° for 15 sec.... The base had a pH of approximately 3.4". Because Jonas does not teach compositions containing milk proteins or vegetable proteins, there is no way that a person of ordinary skill in the art could have concluded anything about how compositions which contain milk solids or other protein in combination with fruit and/or vegetable purees should have been prepared.

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Thus, the methods of preparing the frozen desserts expressly taught by both Brake (column 4, line 59 to column 5, line 12) and by Jonas (column 3, example 1, lines 62-67) involve mixing all the ingredients present in the composition together to form a base and then pasteurizing this base without any steps to ensure that proteins in the mixture are not in a pH environment which is below their isoelectric point.

In contrast applicants' methods require that if the fruit puree and proteins (e.g., milk solids) are to be combined before they are pasteurized, the pH of the fruit puree must first be adjusted to above the isoelectric point of the proteins before it is mixed with the proteins. The combination so obtained in only then pasteurized. Alternatively, the milk solids in combination with water, fat and sweetener can be mixed together and homogenized and pasteurized separately from the fruit/vegetable puree and only then combined with the fruit pureee.

Absent a disclosure of the process steps recited in claim 1, and in fact a teaching away, the combination of references does not present a *prima facie* case of obviousness over applicants claims.

Claims 21 is even more removed from the combination of Brake and Jonas. Neither reference teaches meltdown resistance or meltdown initiation time or any route to optimize this parameter this through processing steps in compositions which contain proteins in combination with fruit purees.

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In light of the above amendment and remarks, applicants respectfully request that the 103(a) rejection over Brake (US 6,432,466) in view of Jonas (US 4,971,824) be reconsidered and withdrawn and that the application be allowed to issue.

If a telephone conversation would be of assistance, Applicant's undersigned agent invites the Examiner to telephone at the number provided.

Respectfully submitted,

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